

Call for a training policy to fill jobs

IN recent weeks we have spoken at length about the difficulties experienced by those looking for a job in the computer business, be they TOPS students, graduates or already qualified people. However, recruitment can cause extensive problems for employers too.

A recruitment ad can cost anything between £60 and £2,000 and the expenditure does not stop there. Interviews, PER or Job Centre fees, staff salaries and many other incidentals are involved in the process.

Unfortunately, this system has become an extravagance but a necessity, as more employers compete for a handful of suitable staff.

For this reason, 14 West Midlands firms decided to co-operate in the fight to reduce staff shortages.

Kalamazoo Business Systems of Birmingham set up talks with British Leyland, Lucas and the National Computing Centre and others in an attempt to find ways of solving the staff problem.

Methods of recruitment and training courses were discussed. Mervyn Farrant of K3 Software Services suggested that universities and polytechnics should be encouraged to attract the "best brains" into studying data processing in order to inject into the industry the intelligence it needed to cope with the required imaginative and sophisticated software solutions.

It was decided that industry, commerce and training establishments get together to coordinate a policy of providing the required number of entrants to systems and programming and to ensure that the training given was related to the needs of the industry — something they all felt was badly lacking.

Doug Brown, executive data processing manager at Kalamazoo, said he believed this type of contact between establishments would be easier at a local level: "I would like to see local firms contributing towards a joint training scheme," he commented.

It has long been believed that the staff shortage in DP is due to a lack of experienced people and that the present state of TOPS and other courses will eventually alleviate the problem.

According to the Kalamazoo talks, this is not the case and the people presently being trained are not really suited to the needs of industry.

Do you have any alternative ideas and suggestions to combat the current staff shortage and the nightmare of recruitment?

Standard of DP applicants 'going up'

DESPISE complaints about staff training and availability, one Birmingham company at least is more than pleased with the standard of applicant into the computer industry.

Jemson Rose Associates, which runs a government-sponsored induction training course, has reported a noticeable increase in the standard of applicant. Robert Moscrop, education director of the firm, said that as a result of recent recruitment in the North there was a 30% increase in the acceptance rate after aptitude tests which he described as "upgraded and more rigorous" than previous testing procedures.

Good news for employers if they are getting a brighter class of trainees — but not, of course, if that person is then trained inadequately.

Plenty for the programmer as ICL launches its 2903 replacement

ICL's ME29, announced last week as the replacement for the successful 2903 series, has plenty in it of interest to programmers.

The machine follows the trend set by Wang with its highly innovative VS computer and, to a lesser extent, by the IBM 8100.

A program development system called Dialog allows a programmer to interface directly to the Cobol or other compiler from a workstation. Programs can be submitted to the compiler and the results displayed on the screen.

The programmer can then use utilities such as the screen editor and text editor to amend the source code. Communication is via forms which are put up on the screen.

A typical 2903 user would normally submit batch amendment cards, which are more likely to lead to error.

Theoretically it would be possible to write all one's programs at the terminal, doing away with coding sheets altogether; but ICL does not expect many users to go that far.

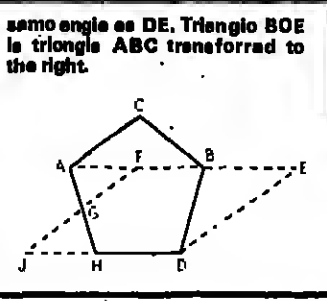
"Programmers are usually not the best typists in the world," comments ICL's Gordon Deham. "Usually we would expect the initial source code to be written on coding sheets and keyed in directly by data entry operators."

In addition, when batch systems are being developed, standard forms can be written into the job control programs, so that the user, such as a clerk in the payroll department, can fill in the details.

Another feature offered on the ME29 enables people developing teleprocessing systems to use them with a TP exerciser which simulates the target network.

Puzzler

ONLY one three-figure number equals the sum of the factors of its own digits (ABC = A! + B! + C!). Can you find it before turning to page 22 for the solution?



by Judith Morris

CTL and CII-HB take on US array processors

BACK-END array and arithmetic processors from Floating Point Systems Inc. of Beaverton, Oregon, are to be offered with their respective minicomputer lines by Computer Technology of the UK and CII-Honeywell Bull of France.

The OEM contract with CII-HB, for FPS-100 arithmetic and AP-120B array processors to be sold with Level 6 minicomputers, is the biggest yet signed by the Oregon company, and is expected to lead to business worth between \$15 and \$20 million.

CTL adopted the FPS processors following an evaluation on behalf of the European Space Agency, which is a major CTL customer. Having linked the FPS array processor to a Modular One via a CAMAC interface, CTL did an integrated solution for its 8040 and 8040 minicomputers in which the FPS operating system runs as an extension to CTL's Modus. The back-end processor runs under the control of this operating system extension on the mini, and work for the back-end is written into Fortran programs as a data statement.

FPS has its own Fortran compiler, and this has been adopted, with the FPS operating system, by CII-Honeywell Bull.

It is claimed that with Level 6/40 or 6/50 minis, the arithmetic processor will perform up to eight million and the array processor up to 12 million floating point operations per second.

First ICL connection

FIRST connection of an ICL computer to the Transpac network has been made — ironically not in France itself, but in Monaco. The connection has been made to allow Rodio Monte Carlo's Paris office, equipped with an ICL 7600 series terminal, to communicate with the Principality's radio station's ICL 2903 computer at its Monte Carlo headquarters.

ICL's solution to the problems of linking to Transpac, which the Knight-Ridder team has prepared its own software. The trial period will be based on 30 terminals which will be moved around among about 200 families.

Unlike the trials in the UK, the Miami tests will not cost the users anything. Even telephone

Second generation Transpac by 1982

WHILE the UK still struggles to get its first generation X25 packet-switched network into service, the French government department in charge of telecommunications is opening consultations about a second generation of the national Transpac network, to begin service at the end of 1982.

Sweden to develop research swap link

SOFTWARE to enable European countries to set up online information exchange systems for scientific researchers is to be developed in Sweden, under a contract just arranged via the EEC.

The work is part of the Cost 11 project (European Co-operation in Science and Technology) and the contract, to implement a portable package usable in any country, has gone to Swedish software house Enea Data.

The system will be similar to the US Electronic Information Exchange System already running (CW, April 26 1978) and will enable researchers with terminals to send messages to each other with a "mailbox" system and take part in "computerised conferences." In these, each participant adds remarks to a continually expanding text that all the others can read whenever they choose to log on.

Enea Data is planning to call its software Eurocom, as it will be based on an existing package called Com developed at the Swedish National Defence Research Institute. It will be up to individual countries to take the software and actually set up working systems.

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VIEWDATA 80 REPORTS BY DONALD KENNETT AND RORY JOHNSTON

French innovations lead the way

VIEWDATA 80 attracted over 60 exhibitors and, when the Canadian participants changed their minds just four weeks before the show and decided they wanted a stand, there were none left.

But the French were there in force demonstrating and talking about how they were integrating their Teletel viewdata system into their national programme for Teletel — computing and communications services of all kinds, "playback" then on making them all compatible with each other as far as possible.

Teletel could be displayed on Teletel which would be able to use the low cost facsimile devices

for hard copy. The electronic telephone directory will be held on Teletel and Teletel will use the Transpac packet switching network and the optical fibre network due to begin tests in Biarritz in 1982.

Antelope is compatible with Teletel and could use Transpac although it was better suited to the Didon data distribution network consisting of microwave links and digital VHF television channels. And the Telecom 1 satellite would enter the same scene in 1983.

To carry the message abroad and seek collaboration with organisations in other countries, the

International marketing organisation was launched at the show, headed by Roy Bright who up until last year carried the message abroad for Prestel.

It is in fact the re-naming of the five month old Sopral organisation, but the new name was thought to be more self-explanatory — International telematique.

● The Prestel stand (pictured right) at Viewdata 80 proved to be popular and the Post Office was able to respond to its critics and its rivals by demonstrating colour photographs on a television screen.



No typists needed for Japanese system

TOUCH typing is not a requirement for information providers on the Japanese Captain viewdata system (pictured left) as the keyboard has about 3,500 keys on it.

Most of these are Kanji Chinese characters, but there are also katakana and hiragana Japanese characters, alpha-numerics and special symbols.

These can be selected in three sizes fitting into a block half-block or sub-block. Graphics can be composed freely on a 248 by 208 matrix using cursor controls and colour selectors or in putting from paper via a facsimile machine.

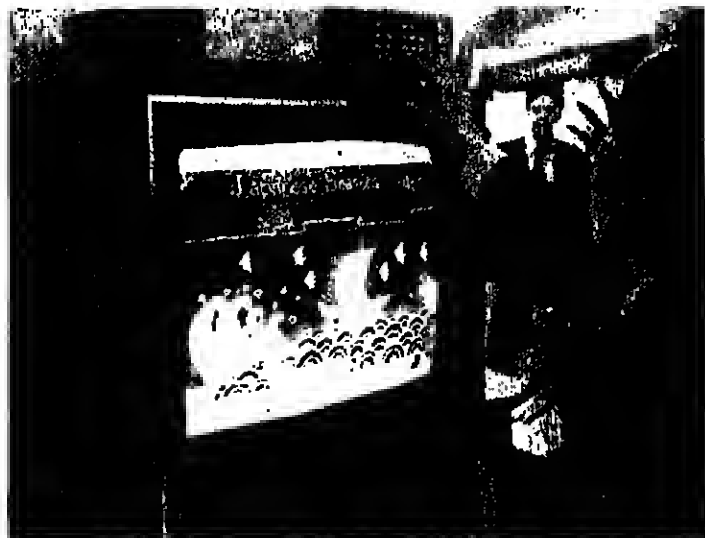
Facsimile input and transmission down the line both use one bit per picture-point to define pattern or background and colour is added afterwards on the sub-block matrix of 31 by 17.

At the user end, images can be scrolled or displayed page by page and images can be modified by sending new data only to the parts that are to be changed. The user terminal has a simple numeric keypad for menu selection or page addressing.

The full complement of 1,000 terminals reached the field at the end of last month for a one year trial which is to be evaluated before a commercial service starts at the end of next year. By then television set adapters are expected to cost £200.

The trial is free to users, sponsored by the Japanese Ministry of Posts and Telecommunications with Nippon Telephone and Telegraph.

The current 35,000 pages on the system are being built up to 100,000, provided by 165 companies including newspapers, department stores, travel and advertising agencies and banks.



The Japanese Captain viewdata system with about 3,500 keys on it.

Post Office replies to Prestel critics

PRESTEL responded to its critics and its rivals at Viewdata 80 by demonstrating the highest resolution graphics possible on a colour television — colour photographs (CW, March 20).

It also demonstrated on intermediate measure, dynamically redefinable character sets, which is used on many personal computers. And with software house CAP-CP it demonstrated teleconferencing.

But Dr Alex Reid, who this month moves up from being director of Prestel, and Keith Clarke, head of Prestel R&D, both still stick to the view that the market is not yet there for these refinements and is best served by the simplest possible service.

Meanwhile there have been enough disagreements internationally on details within the simplest possible service.

Now a set of compromise standards is on its way from CCITT according to several speakers from different countries. It is not ready yet but is expected in June and should accommodate all existing services.

Standards discussions got off to a slow start, but stimulated by the Post Office pushing towards a live service and other coun-

tries speeding up development of their systems much progress appears to have been made.

Many people expect future developments to head for convergence in about five years, with conversion to enable interworking between systems as an interim measure.

Also on display was a coin-operated Prestel system (pictured below, left).

The Post Office is now promoting Prestel strongly through advertisements on television at prime times and full-page advertisements in national newspapers.

This publicity campaign, plus the huge stand at Viewdata 80 last week, shows that the Post Office is pulling out all the publicity stops to promote its Prestel service.



ABOVE from Balidate comes not a Space Invaders TV game but a coin-operated Prestel set, for installation in hotels, stations and other public places.

RIGHT — displayed on the French telecommunications stand were five prototype telephone directory terminals. This is the Tello from CIT Alcatel.

FAR RIGHT — two other contenders for the French PTT's lucrative directory terminal contract were from Matra (left) and TAT (right).

Nato picks picture system

THE Shape computer centre operated in Holland by Nato has chosen the picture description instruction display method used in the Canadian Teldin system for its viewdata communications network.

Peter Drake, who is on secondment to the centre from the Post Office, told delegates at the conference presentation that several systems had been evaluated last year and the PDI method had emerged as by far the most useful technique available, especially for maps. The system had been operational for the last six months. He believed there was a very large market for the PDI concept.

Jack Fraser of Bell Canada said high resolution graphics was a necessity for business and claimed that the efficiency of the PDI method made nverage frame costs lower than with dot transmission methods.

Herb Bown of the Canadian government Department of Communications said that, although automatic picture generation was more difficult with the PDI or alpha-geometric method, pattern recognition techniques had been well proven in the laboratory with automatic PDI generation and could soon be added to the system.

Bown said the prototype IPS 1 terminal had cost \$30,000, but IPS 2 would cost \$18,000.

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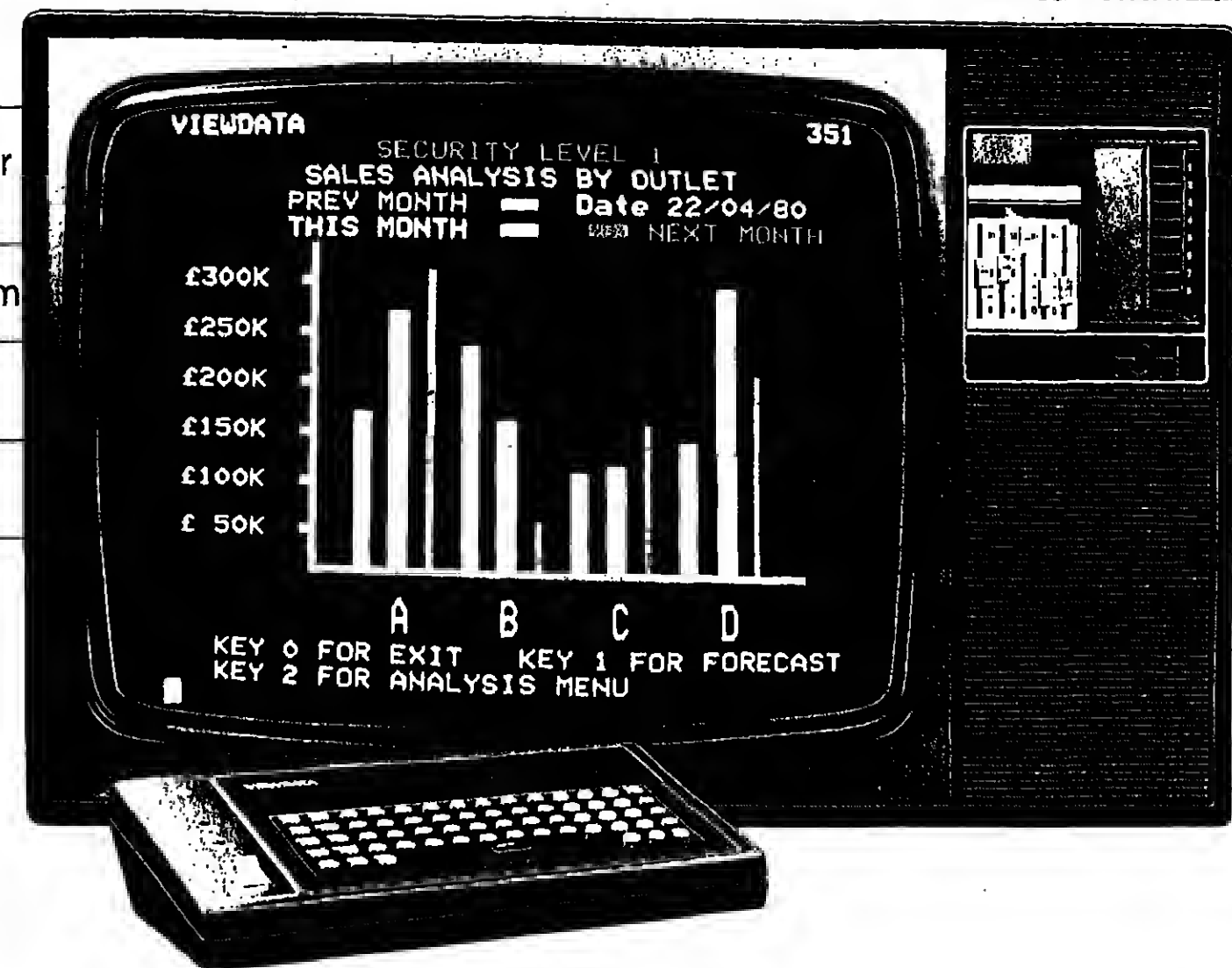
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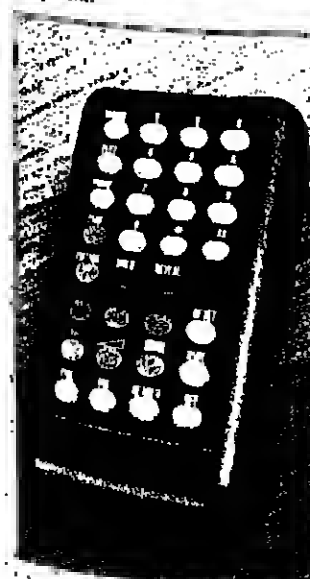
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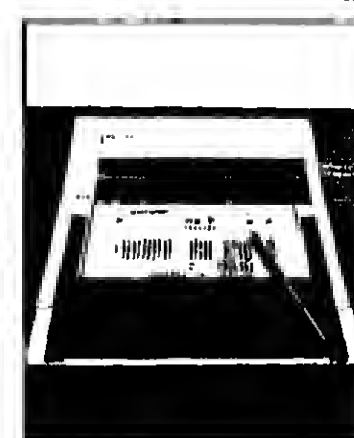
It's also the most spectacular feature of the remarkable new Integrated Office System from Redifon — the first system to combine advanced television technology with established computer and telecommunications techniques, and so to provide everything conventional terminals can (distributed data processing, data entry, data processing, word processing) plus viewdata facilities (including private viewdata) plus advanced data communications.

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As well as Viewdata-Plus intelligent TV computer terminals, the system also includes the following equipment:



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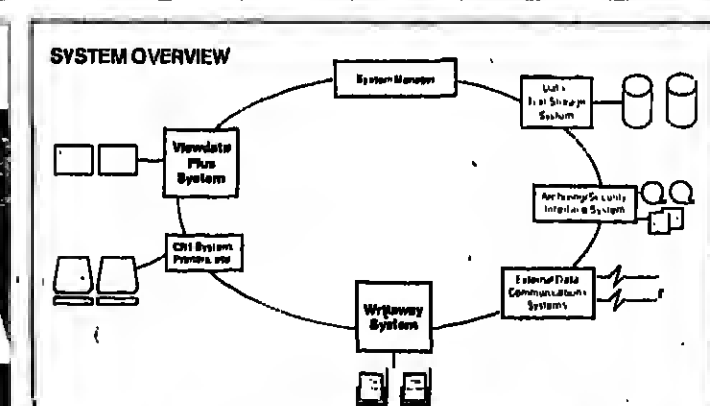


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Choose your hardware
A system may incorporate Writaway terminals, Viewdata-Plus TVs, and CRTs. Each Viewdata-Plus terminal may have a full keyboard, or simply an infrared control — so you can tailor each station to suit your requirements.

A Viewdata-Plus terminal and a control, for instance, give lamp-proof access to viewdata, with or without real-time, interactive numeric updates.

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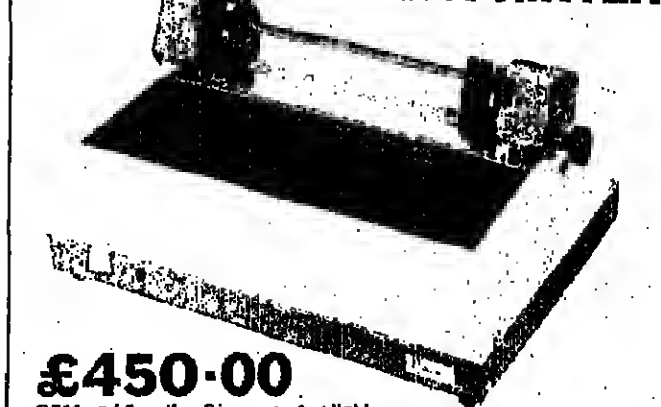
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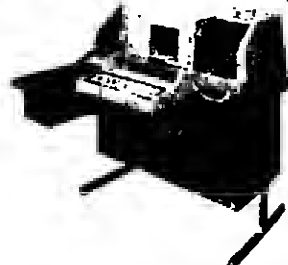
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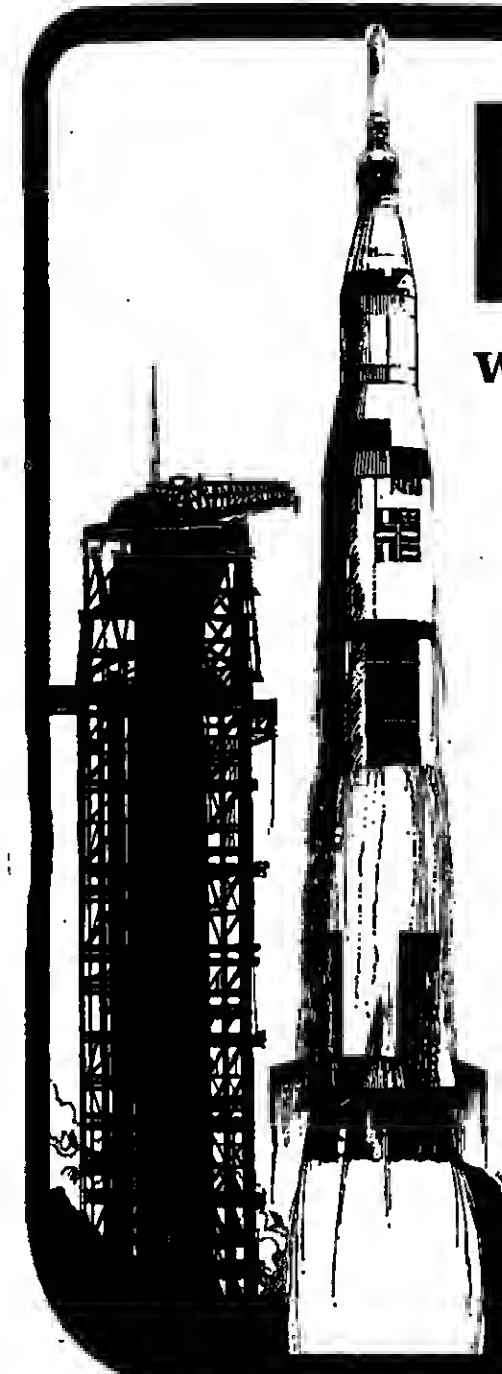


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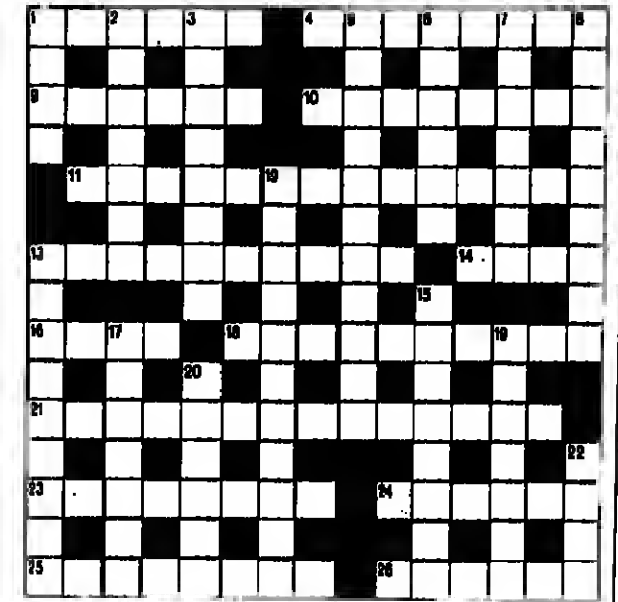
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CW Prize Crossword No 4

Compiled by Alec Robins

A PRIZE of £10 will be awarded for the first correct entry opened. The second and third correct solutions opened will receive £5 each. Entries to Crossword Competition, Computer Weekly, Dorset House, Stamford Street, London SE1 8LU, by first post Friday, March 14. Please use a ballpoint pen to complete the crossword.



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Application forms can be obtained from the Personnel Office, Central Depot, Hundred Acre Lane, Carlton Forest, West-rop, Notts. S11 0TB. Telephone No. 476631, extension 288, and should be returned by Monday, 16th April, 1980.

three weeks after the puzzle has been published.

4. Winners will receive their prizes during the month following the completion of the puzzle.

5. The decision of the editor on the interpretation of the rules and conditions and on all matters relating to the competition shall be final. No correspondence will be entered into.

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The successful candidate will be responsible for the day-to-day support of the Centre's extensive and expanding communications network. The work is varied and involves the analysis and rectification of technical and operational problems, liaison with users, staff and suppliers, and the planning and implementation of new systems.

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Standing salary within the range of £2000-£2400 p.a. (under review). Applications should be sent to: Mr. P. M. BLACK, UNIVERSITY OF LONDON COMPUTER CENTRE, 25 GUILDFOURD STREET, LONDON, W.C1E 6BT. Tel. No. 01-253 6400.

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